U. S. WEIGHTS, MEASURES, AND BALANCES.

Upon a late visit to the Office of Weights and Measures, of which Professor ALEXANDER D. BACHE is the Superintendent, a variety of items of information were obtained which may prove interesting to our readers. In the year 1835 the Senate passed a resolution authorizing the construction of standards of weights and measures for the custom-houses of the Union; in 1836 the Treasury Department was directed by Congress to have set of these standards made for the several States of the Union, and in 1838 the construction of standard balances was ordered by the same authority. This work was originally under the direc tion of EDWARD T. HASSLER, Esq., who, previous to his decease in 1843, had made considerable pro gress. Since that time the work has been under the superintendence of Professor BACHE, Superintendent of the Coast Survey, but under the execu-

tion of Joseph Saxton, Esq.

The object to be attained by the distribution of the above standards to the States and the customhouses of the United States is a complete uniformity of weights, measures, and balances. In accomplishing this end, it is expected that copies of the original standards will be distributed by the State authorities to the counties of each State, and by the counties to the towns and parishes. We cannot hope to give our readers an idea of the exquisite mechanism and high finish which distinguish the original standards; we can only say that no stranger ought to visit Washington without making a brief visit to the establishment where they are manufactured. The material of which they are made is brass, composed of an alloy of three parts of copper and one of zinc. The county standards are expected to be made of the same material, while those for the towns are to be made of iron instead of brass.

On questioning Mr. Saxton with regard to the origin and legal enactments of the standards of weights and measures, he gave us the following information:

The actual standard of length is a brass scale eighty-two inches long, prepared for the survey of the coast of the United States by Troughton, of London, and now in the office of weights and measures.

The units of capacity-measure are the gallon for liquid and the bushel for dry measure.

The standard of weight is the troy pound, copied by Captain Kater in 1827 from the imperial troy pound employed by the United States Mint, and now preserved in that establishment.

A complete set of standards of weights and measures supplied by the Government consists of, first, a set of weights from one pound avoirdupois to fifty pounds, and a troy pound; secondly, a set of weights from one ounce troy to one ten-thousandth of an ounce; thirdly, a yard measure; fourthly, a set of liquid measures, consisting of the gallon and its parts, down to the half pint, inclusive; and, fifthly, one half-bushel measure.

The States which have already been supplied with these standards are as follows: Maine, Massachusetts, Vermont, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Delaware, Maryland, Virginia, North Carolina, South Carolina, Georgia, Alabama, Michigan, Ohio, Kentucky, Illinois, Masouri, and Arkansas. The States of New Hampshire, Tennessee, Louisiana, Indiana, and Mississipp are only partly supplied, and orders have been received by Professor BACHE to prepare standards for Florida, Texas, Iowa, and

With regard to the balances, we are informed that complete sets have already been forwarded to the States of Ohio, Maryland, New Jersey, New York, Massachusetts, Delaware, and South Carolina, and that seventeen additional sets are now ready to be delivered to the first seventeen States that will inform the Government of their readiness to erect them. When these States are prepared to receive the balances, suitable persons will be sent to set them up and explain their construction and use and Professor BACHE considers it desirable that gentlemen connected with learned institutions should have charge of the above standards.

mention the fact that a complete set of the above standards are to be presented to the Government of France, at the suggestion, we believe, of M.

OFFICE OF INDIAN AFFAIRS. On visiting the Office of Indian Affairs the other morning. a friend of ours fell into conversation with HENRY R. Senool-CRAFT, Esq., in regard to the famous tribe of Iroquois Indians, which is said to have been the most powerful group of American aborigines. We were shown the reprint of a report, originally made by this gentleman to the Legislature of New York, on the history of this tribe of Indians, and found it exceedingly rich in the departments of traditionary history and philology. Among the matters discussed in this volume is the curious fact, in a political point of view, that the principles of the ancient Iroquois confederacy required absolute unanimity in all the cantons, in order to bind them in questions of war and peace. According to Mr. Schoolcraft, the Iroquois are in a state of advanced semi-civilization; they are producers of a greater amount of grain and other agricultural means than they consume, and appear capable of sustaining a fair rivalry with their Anglo-Saxon neighbors in the field of husbandry. Since the publication of the above mentioned report, the Legislature of New York has made provision for extending a complete school system throughout the tribes within the borders of that State, and also enacted laws for their especial benefit. We also understand that, under an act passed by the Government of the United States, Mr. Schoolcraft is now devoting his entire time to making researches and collecting statistics respecting the Indians of the Great West, with a view to the future policy and legislation of our Government respecting them. If it be for no other purpose but to dissipate the false impressions heretofore exist-ing in regard to the manners and customs of the North American Indians, as well as to their character, condition, and general ethnology, the labors of this gentleman must meet with a friendly response from all, on the frontier or elsewhere, who are capable of furnishing authentic information. Our obligations to these tribes are not wholly performed by giving them money and merchandise. They have claims to the patronage of our Government which can supply them with the blessings of education, christianity, agriculture, and the arts. The Indian tribes now living on this continent are the remains of an ancient but long-lost branch of mankind, who were the original possessors of the soil. They appeal to our nationality in its highest aspects, and we are responsible for our treatment of them under the maxims of civilization. The labors upon which Mr. Schoolcraft is now engaged are net only valuable but exceedingly interesting, and we hardly know of a public office in the city where one can spend a more agreeable hour than in examining the documents and Indian publications which may be seen at the Office of Indian Affairs.

FATAL RAILROAD ACCIDENT .- On Wednesday, as the train for Albany was in the vicinity of the Palmer Depot, a man in a sleigh was seen in the act of crossing the track. The whistle was blown to warn him of his danger, when, after a moment's hesitation, he whipped up his horse and attempted to cross in front of the train. The locomotive, however, struck the horse; and, after whirling him round two or three times, threw him down a bank of some fifteen feet. The man was thrown upon the track, and the train passed o him. Both his legs were cut off and he was very badly mangled about the shoulder. He lived but a short time. We hear that his name was Blanchard, a farmer, and that he we pwards of seventy years of age .- Boston Traveller

lakes, we see by the annual census for the year 1848, taken in October, continues its steady and somewhat rapid growth. The number of males is reported at 7,076, of females 6,583: total 13,959, to which 575 are added for the "ten acre lots," (eastern liberty.) making the whole number of inhabitants 14, 234. The number of colored people in the city is put at 184.

INTERNATIONAL COURTESIES.

PROM THE NEWARK DAILY ADVERTISER.

GIBBON, the Historian, once remarked in a spirit fond anticipation, that he " always reflected with pleasure that whatever might be the changes in the olitical situation of the North American Colonies, they would always preserve the manners of England, and that the English language would yet be diffused over an immense and populous continent." It was in this spirit of partial fondness, too, that the venerable Chatham, at a later day, in the exercise of a wise forecast, admonished the British Parliament against all measures to alienate the heart of the child from the mother. And how completely have the delightful anticipations of these wise men been realized! An Englishman should always cherish such feelings towards us. No disposition could be more natural and just, and every expression of such sympathies and affections is sure of a cordial response.

We notice, therefore, with much gratification an agreeable instance of the interchange of these naional courtesies, in the anniversary proceedings of an Agricultural Society in Essex, as reported by an English journal. The meeting was held in the Agricultural Hall at Saffron Walden, which was fitly decorated for the occasion. It was an imposing assemblage. Lord BRAYBROOKE presided, and among the distinguished persons present were Lords Sondes and Walsingham, Messrs. Dun-COMBE, MEUX, NEVILLE, and other M. P.'s, Hon. A. HERBERT, and Messrs. Colman (the eminent American agricultural agent) and Basserr, of the United States, &c.

After speeches by the Chair and the Vice Presi-

Lord Sonnes was called out, and said : Lord Braybrooke had stated some of the advantages of keeping up these associations, and there certainly never was a time when they were more necessary. [Hear, hear.] He had also alluded to the excited state of continental nations, and how happy England ad been in stemming the tide of revolution and warfare; but he (Lord Sondes) had to advert to another nation whom they might call brothers, with whom, owing to the extraordinary rapidity and improvement of navigation, they were daily be-coming united; and he would express the hope, not only as individual, but as the national feeling, that never again might they see a war between us and that nation; he spoke of the United States of America. [Loud cheers.] Never again might they contend except in the friendly competition of com merce or in the skilfulness of handling the plough, which should improve agriculture to the utmost, and which could best advance the moral as well as the temporal condition of all classes of society. [Applause.] The hospitality of their noble President had given them the opportunity of meeting two individuals from the country alluded to, and one of them gentleman who had been long engaged in England studying the science of agriculture and the best manner in which it concerns could be benefited. [Hear, hear.] He begged to give them, "Prosperity to the United States of America, with the health of Mr. Colman." [Much applause.]

Lord BRAYBROOKE added that they had the pleasure of know-ing Mr. Colman as an old friend, and he (the President) took with his friend, Mr. Bassett, for the United States. He therefore called upon the company to give three cheers for the

The call was most heartily responded to, and-Mr. Colman said: I am deeply sensible of the honor you have done me in drinking my health, and I am most happy to meet the farmers of Essex as a recognised old friend. I am grateful for the terms in which the noble lord has been pleased to speak of my country, and to express that which I am sure is the general wish of this assembly for the prosperity of America. I do assure you that I believe if there was an electric elegraph from the shores of the United States to the shores of England, by which the wish could be communicated, it would born American. [Applause.] In wishing prosperity to this country—prosperity to England and the United States—perthat my first intention involved the promotion of agriculture. I came to this country to look at the agriculture of England, and, in accordance with that intention, I have visited several counties: I have exerted those humble talents for observation which God has given me, and I must say that in some respects, as regards the improvement of animals especially, England distances all other countries in her enterprise; in her desire of improvements she still remains unrivalled. I should do wrong not to speak my mind fairly before Englishmen. And in some respectsshe is outdone by the Flem ish; but in all other respects there are at work those means, pur poses, and sentiments which are sure to come out at the head of the race, unless we on the other side of the water do ou best to beat her. [Applause.] I have said that the agricul-ture of England requires some improvement. In all human probability this will be the last occasion on which I shall have t in my power to address an assemblage of English agriculturists, for I am an old man, in the decline of life, and, therefore, I must crave your indulgence if on this occasion I extend my Flemish have a proverb which involves the whole system of agriculture: "Without forage, no cattle; without cattle, no manure; without manure, no crop." [Applause.] Now, I take on myself, in the first place, to say that you are deficient in the saving of manure; and, in the second, your crops are not near so large as they might be.

After elucidating his positions at some length, and with

much point, the speaker thus concludes : I have done; I part from you with the deepest and mo grateful affection for an hospitality I have found unbounded r kindness that has been unceasing, and an intelligence an refinement of manners that are without a rival, ur by any part of the world : and I can only pray that the sym pathies that bind together these two nations of the earth in peace and civilization, the mother and daughter, the parent and child, may grow stronger and stronger. [Applause That which was considered the means of separation has b come a bond of union; and may this union continue. I am too much oppressed with all I have seen in England to ex-press my wishes as I could desire; but I exceedly pray for the continued prosperity, for the wealth, happiness, and glory of that magnificent, that great and glorious land in which you

Major BERESFORD, a member of Parliament, returns thanks in a speech of considerable length in behalf of himsel and the other members, whose health had just been drunk.

Mr. Basserr said there was nothing which could more contribute to make an American feel at home in a foreign country than to find himself in a company like the present— speaking the same language, of kindred origin, and familiar with similar institutions existing in his own country-met to gether for the purpose of improving the various productions of agriculture, and encouraging that most useful branch of na-tive industry. [Applause.]

They would allow him to say that the harmonious inter-

course existing between the two countries afforded facilities for their mutual improvement, and he could not but hope that they would ever co-operate in making improvements and ad-vancements in all the useful arts. Further, he trusted that in the present agitated state of the world they should co-ope rate to give stability to those free institutions which charac erized their respective Governments. Republicanism seem ed to be the predominant feeling of the world, but he might observe that that vague and indefinite notion of republica was not very likely to prove successful where it originated.
[Hear, hear.] To establish a republican Government was

It was a Government of a complicated character, requiris particular education and habits, and must be established for some time before it could be considered a permanent Government. [Hear, hear.] The, experience derived in the United States of free institutions established in the form of a republican Government might be considered rather as a phenomenon, and one that did not exist in any other part of the world. Here again he might remark that for this good fortune they were mainly indebted to Great Britain. The people who first settled in America came over fully impressed importance of the British constitution; and had it not been for that circumstance they should not have been able to embody in republican form those principles of civil and religi-ous liberty which particularly characterized the Government of England. [Applause.]

THE LATE STORM AT THE EAST-MORE DISASTERS AND Loss or Life. - The Boston Traveller of Tuesday has accounts of further disasters at sea during the late storm. The British scheoner Olive, Oliver, was wrecked near Point

Alderton. All hands lost. She had five or six persons on Schooner Welcome Return, Captain Hewett, of and fro Prince Edward's Island for Boston, went ashore at Rocky Hill, off Plymouth, on the evening of the 20th instant, and immediately went to pieces. The crew were all saved, woman who was on board, with six children, succeeded reaching the shore with her infant in her arms, while the other five were lost. A correspondent of the Courier says that "their bodies were recovered and placed in the Town Hall, presenting five as beautiful faces as were ever seen in

one fam Ship Clare, of Portsmouth, Capt. Penhallow, from Cadiz, October 1st, went ashore on Truro Beach, two miles south of Cape Cod light, on Monday, at 9 A. M. Capt. Penhallow crisis in the financial affairs of Maryland, and presented a fair

INTERESTING CORRESPONDENCE.

FROM THE BALTIMORY PATRIOT OF MOVEMBER 21. We have been furnished with the following cor-

spondence for publication. The letters will sufficiently explain the circumstances under which it took place. Mr. Peabody, who was made the special object of the thanks of the Legislature of Maryland, will be remembered by many of our citizens as formerly a distinguished merchant of Baltimore, but who has for many years been a resident of London. The Governor, in transmitting to him the resolutions of the Legis lature, selected Mr. SPEED as the medium through whom they should be communicated, because, as it may readily be supposed, of the prominent and influential part taken by Mr. S. in the great work of redeeming the faith of the State, which was so happily and so successfully accomplished at the session of the Legislature of 1846. Such marks of approbation are not often given, and are the more on that account to be esteemed. They could not be more worthily bestowed than they were on this occasion.

Letter from Gov. Thomas to J. J. Speed. Esq.

STATE DEPARTMENT, ANNAPOLIS, OCT. 20, 1848. MY DEAR SIR : You were good enough, at my request, to consent to take charge of the resolutions of the General Assembly, referring, in complimentary terms, to the conduct of Mr. Geo. Peabody in connexion with the public debt of the State, and to forward them, as soon as received, by some safe conveyance to London. I have now the pleasure to place in your hands these resolutions, together with a letter from myself, drawn in such terms as I conceived to be appropriate, and in conformity to what I suppose was the intention of the Legislature, as expressed in the last of the resolutions. I also herewith enclose copies of both these papers, to be used as you think proper. For your kindness in undertaking to cause them to transmitted, you will be pleased to accept my thanks.

I am, dear sir, your obliged and obedient servant, PHILIP F. THOMAS.

J. J. SPEED, Esq. Letter from Mr. Speed to Geo. Peabody, Esq.

BALTIMORE, NOVEMBER 13, 1848. My DEAR SIR : The Governor of Maryland-referring, presume, to my late correspondence with you on several pub-lic topics—has chosen to make me the instrument of transmit-ting to you the resolutions of the Legislature, passed at its

ung to you the resolutions of the Legislature, passed at its late session, tendering you the thanks of the Government for your effective zeal and prominent agency in upholding the honor of the State in its late afflictions in a foreign land, and in presenting its integrity, in true lights, to foreign minds.

When you reflect that these resolutions convey the thanks of a sovereign State—one of those that laid the foundations of this republic—for services rendered her reputation abroad, you will not fail to visce the lights. -for services rendered her reputation abroad, you will not fail to prize the distinction, but will, I know, regard it with the emotion it is so well calculated to awaken. cial life, we are often assured, there is no higher impulse than that which prompts us to shield from accusation the good name of an absent friend; and the charities of our nature are never more beautifully displayed than when employed in covering the blemishes of those with whom we are by kindred ties; but the love of country is a nobler passion, the impulses of patriotism are nobler emotions; and what prouder political duty can the citizen discharge than that of upholding in a foreign land the good name of his country, till truth shall come to rescue its impugned reputation? I must confess I should covet it before the lustre of arms, the achievements of war, the triumphs of ambition, or any of the more captivating successes of genius. And it is your felicity, sir, to be in the position I thus contemplate; and your happiness, moreover, to be assured that your country fully appreciates your services. In this instance, most certainly, the resolutions of the Legislature fulfil the theory of representative assemblies; they give true utterance to the popular voice, and true expression to the popular sentiment. And I need scarcely refer to the perfect unison that exists between the senti ments of the Legislature and those of the Governor in regard to your services. His Excellency's letter to you, with a copy of which he has honored me, speaks very fully for itself on th

Repudiation is stricken down in Maryland, and will con tinue motionless. In other parts of the Confederacy it is sinking back into those gloomy abodes of bad minds and vulgar breasts, where it was engendered, and which, as harbon and refugee of vice, untappily for mankind, exist in all countries. Their great monitor, after all, is a sound public sense and this is awakened in Maryland in its most formidable power. I am happy to report to you that our revenue laws are even more effective than we had hoped for them. The amounts returned into the Treasury and the steadiness of the collections have gone beyond the public expectation. This, while it denotes diligence and fidelity in the administration of the laws, proves also that which is before all and above all, and our chiefest pride-a devoted willingness on the part of the tax payer. It is not the Governm ent that is paying this debt; it is the noble-hearted people of Maryland. They themselves have spontaneously enacted the laws under which these great contributions are drawn into the Treasury; and their willing response to the tax-gatherer at their doors carried out in practice the enlightened and just spirit of their legislation. Permit me, in conclusion, to assure you of the grati-fication it has afforded me to have been selected as the medium of a communication so creditable to the Legislature and honorable to yourself. The spirit that has prompted these resolutions is worthy of the enviable relation in which you stand to us; and I feel a pride in believing that, disinterested and generous as have been your efforts, they have been mos fully met by the sensibility they have excited and the just appreciation in which they are held by every citizen of Mary land. I pray you to believe me, as always, very faithfully

GEORGE PEABODY, Esq., London.

Letter from Gov. Thomas to Mr. Peabody. STATE DEPARTMENT, ANNAPOLIS, (MD.) OCTOBER 20, 1848.

Stn: I have the honor herewith to transmit the enclose preamble and resolutions, passed unanimously by the General Assembly at its last session, tendering the thanks of the State for the generous and patriotic interest manifested by you i the restoration of the public credit at a time when Mary land, in common with many other of the States of the Union. vielding to the weight of her financial embarrassments, wa compelled temporarily to suspend payment upon both her for-eign and domestic debt; and more especially for your disinterestedness in relinquishing all claim to compensation for services rendered, and to which, upon every principle of law and justice, you were fairly entitled. Instances of such devotion on the part of a citizen to the public welfare are of rare occurrence, and merit the highest distinction which a Commonwealth can bestow. To one whose actions are the resu of impulses so noble and self sacrificing, next to the approval of his own conscience, no homage can be more acceptable than the meed of a people's gratitude—no recompense so grateful as the assurance of the complete realization of those grateful as the assurance of the complete realization of those objects and ends whose attainment has been regarded as of higher value than mere personal convenience or pecuniary consideration. The Legislature, in the passage of these reso

utions, has not misconceived the sentiments of its constituents. The people of Maryland are proverbially magnanimous and atriotic, sensitively alive to whatever concerns or public honor, and profoundly grateful to all by whom either the one or the other has been vindicated or sustained. Ex-empt as they had always been, except for a single year and for a limited amount, from direct contributions to the Trea-sury, and unexpectedly overwhelmed with an enormous debt, it is not wonderful that delays and difficulties should have been encountered both in maturing and enforcing the nece sarily complex details of any system of taxation at all adequate to meet the annually accruing interest, and ultimately to extinguish the principal of her public obligations.

The work of restoring the credit of Maryland, beset as was with embarrassments and unaided by the light of expe rience, was nevertheless undertaken with a zeal commensurat with the importance of maintaining unsulfied the plighted faith of the State, and with a decision and energy calculated to ensure success. By the act of December session, 1846, chapte 238, the Treasurer was directed to resume payment of the cur rent interest on the public debt on the first day of January. eighteen hundred and forty-eight. By the same law the Cor eighteen numered and forty-eight. By the same law the Com-missioner of Loans was authorized, at any time after the first day of October, eighteen hundred and forty-seven, upon the delivery to him of the coupons and certificates of interests due and unpaid upon the public debt, to issue to the holder or holders thereof the bond or bonds of the State for the amount of such coupons or certificates, redeemable at the pleasure of the State, bearing an interest at the rate of six per centum per annum from the first day of October, eighteen forty-seven, and payable annually at the Loan Office in

The effect of this latter provision of law was to convert into principal the entire amount of the interest on the main debt of the State which remained unpaid, and thereby to add to the burdens of the people an additional annual charge for interest, at the rate of six per centum per annum, upon a sum not far short of a million of dollars. The first day of the present month was the period at which, under the operation of the commence. On the same day a quarter's interest on the main debt, payable at the Loan Office, and also the semi-annual interest, payable in London on the first day of January next, tewise falling due. That day, of course, formed a was lost overboard a few minutes previous to her striking. test of the ability of the Treasury to discharge in full all the engagements of the State.

I have purposely delayed the communication of the enclosed resolutions until the period above referred to had passed by, believing that I could render you no more acceptable service than by accompanying their transmission with the intelligence of the entire success with which the efforts to restore the credit

of the State have been crowned. It is my privilege to inform you that the liabilities of the State payable on the first of October have been promptly met without the slightest inconve-nience to the treasury, and that, after the payment of the quarter's interest then due, of the sterling interest due on the rst of next January, and the interest on the funded arrears, there remained a surplus, which is every day increasing, much more than sufficient to cover the balance of the January instalment payable at the loan office in Baltimore. The credit of Maryland is thus fully restored, her public honor redeemed, every suspicion of bad faith removed, and no reasonable doubt emains as to her ability to maintain the proud and elevated

osition she now occupies.

To you, sir, who have had no inconsiderable agency in the shment of this gratifying result, the thanks of the State were eminently due. The action of the General Assembly effects faithfully the feelings of gratitude which your generous levotion to the interests of the State has awakened in the bosom of every good citizen of Maryland; and, while I am happy in having been made the organ of communicating this wellerited tribute to your public and private virtue, I avail myself of the opportunity which the occasion affords to assure you that the sentiments embodied in these resolutions have

Commanded my most hearty and cordial concurrence.

I have the honor to be, with great respect, your obedient servant,

PHILIP F. THOMAS. GEORGE PEABODY, Esq., London.

Resolutions of the Legislature of Maryland.

BY THE HOUSE OF DELEGATES, MARCH 7, 1848. Whereas Mr. George Peabody, a citizen of Maryland, now sident of London, was appointed one of three Commissioners, under the act of Assembly of eighteen hundred and thirty-five b negotiate a loan for this State, and, after performing the duties assigned to him, refused to apply for the compensat llowed by the provisions of that act, because he was unwilburdens of the State at a time when she was verwhelmed with the weight of her obligations: And wheres, since the credit of the State has been restored, he has vountarily relinquished all claim for the compensation due to him for his services, expressing himself fully paid by the gra-tification of seeing the State freed from reproach in the eyes of

Be it unanimously resolved by the General Assembly of Maryland, That the record of such disinterested zeal is a higher praise than any that eloquence could bestow, and that this Legislature is therefore content with tendering the thanks f the State to Mr. Peabody for his generous devotion to the terests and honor of Maryland.

And further resolved, That the Governor of this State be equested to transmit these resolutions to Mr. Peabody in such ner as he may deem most appropriate.

By order: GEORGE G. BREWER, Clerk.

By the Senate, March 8, 1848.—Read and assented to. By order: JOS. H. NICHOLSON, Clerk. True copy. Test R. W. GILL, Clerk Court of Appeals W. S.

COMPOSITION OF BONES.

Bones differ slightly in composition in different animals her vary also with the age of the animal and the part of the body from which they are taken. The following composition of the bones of the cow will represent very nearly that of the

organic a Phosphate	of	lime		 						55
hosphate	of i	magne	sis.		 					3
Carbonate	of	lime		 						3,
ods and	com	mon s	alt.	 	 					3
Chloride	of c	alcibn				-		 Ĩ	4	1

When bones are burnt in the open fire the animal matter they contain (the gelatine) disappears, and the white bone earth slone remains. These two portions of the bone, the ombustible or organic and the incombustible or inorganic part, are equally essential to the fertilizing action which the bones produce. As some inexperienced writers have disputed this n regard to the organic part, it will be proper briefly to advert to its composition and mode of action

Composition and Mode of Action of the Organic Part of

						1	'n	17	lé	8														
The gelatine	of	Ь	on	es	c	0	25	si	st	B	0	í	_	_										
Carbon								,													. 5	0.	37	
Hydrogen.		٠.																				6.	33	1
Nitrogen		٠.																			. 1	7.	95	,
Oxygen			80													*0		6			. 2	5.	35	,
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																				2	10	101		

It is identical in composition with horn and with isinglass and is very nearly the same as hair, wool, and skin. It is of mportance to recollect that it contains about eighteen per cent. r one-sixth of its weight of nitrogen-

nure is rendered probable by the fact that horn shavings are highly valued as an application to the land, and that the parngs of hides and woollen rags are at a high price in the narket as manures for certain crops. But that it does act beneficially is proved by the success which

n Manchester bones are boiled for the extraction of a size, glue which is used in the stiflening of calicoes.) he stiffening liquor is so exhausted as to be unfit for further ase, it has been applied as a liquid manure to grass lands with the greatest success. There can be no reasonable question, then, that upon the organic part of bones their beneficial action as a manure in some degree depends. It is only surpris-ing that chemists of name should have been found to deny it, and that practical men should have so far distrusted their own experience as to have believed and acted upon such an opinion.

But how does this organic matter act? It no doubt feeds

he plant, but it may do this in one or other of two ways. It may either be completely decomposed in the soil, and enter the roots of plants, as Liebig supposed all organic nourishment to enter, in the form of carbonic acid and ammonis, or it may be rendered soluble in the soil, and may thus be taken up by the roots, without undergoing any ultimate and thorough

Now, supposing it to be resolved into carbonic acid and ammonia, the quantity of gelatine contained in one hundred rounds of dry bones is sufficient to produce upwards of six and a half pounds of ammoniae, as much as is present in twenty bounds of sal ammoniae, or in thirty pounds of crystallized sul-phate of ammonia. Supposing the animal matter of the bones to be thus decomposed in the soil before it can be useful to the plant, few, I think, will question that the quantity of mmonia it is likely to produce would materially aid the growth of the crops to which bones are applied.

But I do not think this final decomposition necessary. The

large quantity of nitrogen which the gelatine contains may, I clieve, be taken up by the plants without being previously rought into the state of ammonia. The gelatine being rendered soluble in the soil, may enter the roots, and may at once minister to the growth of the plant, just as the gluten of the seed, being rendered soluble when the grain germinates, as-cends with the sap and feeds the young plant. It would be out of place here to discuss this point, or to give the reasons which induce me to entertain this opinion. It is sufficient for the practical man to know that, which ever of these views a man may hold, he must still grant that the gelatine of the bone is valuable to the farmer. Whether its nitrogen enter into the root in the form of ammonia or in some compound state, it must be useful to the plant; and therefore he who advises e farmer to burn his bones, or would persuade him that the earthy part alone, or any thing equivalent to this earthy part, would alone be as useful to his land as the entire bone, advises him to his hurt, and would persuade him to that which would eventually be a source of loss:—Prof. F. W. Johnston.

ACCIDENT AT A CIRCUS .- During a performance at Lafayette, (La.) on Sunday, the 13th instant, not less than 3,000 persons were in attendance. Heavy rains had preceded the performance, rendering the ground set. The great performance, rendering the ground soft. The great weight caused the posts which sustained the seats to slide, so that a row containing several hundred persons came down with a sudden and tremendous crash. A child of Mr. John ambert had its thigh broken ; another of Mr. Adam Wagner, an arm fractured ; Mr. Rogers had three ribs broken ; besides several contusions sustained by other individuals.

ANOTHER DEATH FROM HYDROPHORIA -A lad, pamed David Burchell, about fourteen years of age, residing in Yorkville, New York, died on Wednesday of hydrophobia, naving been bitten three months before. As soon as it was ascertained beyond doubt to be a case of hydrophobia, chloroform was administered, which seemed to have such good effect that more was procured, and by its application the spasms were entirely relieved. He remained free from spasms for were entirely relieved. He remained free from spasms for nearly seven hours, when he died. This is a singular case: that the chloroform should so speedily relieve the spasms, and yet the patient should die while apparently perfectly easy.

Mode of Extinguishing Fires at Sea .- As carbon scid gas will not support combustion, Dr. Reid has suggested its application to extinguish fireson loard vessels at sea. The production of the gas is simple and at command , all that is necessary is to have a quantity of chalk or refuse marble chips in the hold of the vessel, and a cistern containing dilute sulphuric acid. The acid can be made to flow through gutta percha pipes upon the chalk or marble when required. The cost of material for a ship of a thousand tons would not exceed fifteen or twenty pounds. Dr. Reid remarks that lightning conductors are provided for ships and surgeons for the health

A REMINISCENCE.

niscence of Providence in the olden time : The burning of the old Seaver House the other nigh pro

duces recollections of transactions long passed. The house was supposed to have been built more than one hundred years ago by Mr. Seaver, who inhabited it during his long life, and oft it to his son Oved and a sister. Obed was what was caled a paper money man. The State had emitted a large batch f paper, the circulation of which was to be enforced by an act called the penal law, which sentenced the person who refused to receive it at par with hard money to a penalty of a hundred ounds. In consequence of this penal law the shops were nostly shut up, and the market was closed, as one dollar in liver would buy five dollars in paper. Charles Lippitt only had the courage to open his shop, which stood on Whitman's Obed Seaver went there to buy a jackknife. He ask ed the price, and was answered a quarter of a dollar. He then selected one, and took out a quarter of a dollar bill and offered it in payment. Lippitt returned the knives to the shelf and told him he did not take paper money. Seaver then went to Judge Thompson, the Chief Justice of the County Court, with a form of complaint against Lippitt for refusing to take the paper. The Judge, by the terms of the law, was bound to receive the complaint, and decided that the Court be held at 3 o'clock the next Monday afternoon. The next Monday afternoon the court-house was crowded with the anxious citizens, and each of the parties had his attorney. was looking for. Makes a nature.'

Samson appeared for Seaver, and Bourn for Lippitt. Samson plead that the General Assembly had full power to make all laws by the charter at their discretion. Bourn contested this power, as the bill of rights secured to every man the right of a trial by jury, &c. They each spoke about an hour, and when they had ceased the Judge arose and stated that we must support the dignity of the State. The laws must be obeyed, the character of the State required it. But as many things had been said about constitutional rights and bill o rights, &c., the Court would take time to consider, and adourned the Court to the next Menday, at 3 o'clock in the

The next Monday the court-room was again crowded with people. The Judge took the chair again, and the lawyers made speeches of the same amount as before. The Judge heard them with great patience for more than two hours, and then arose and made a speech similar to what he had said be-fore, and concluded with, "The Court will take time to con-The Court is adjourned to next Monday, at 3 o'clock in the afternoon." The next Monday the room was again filled, but the Judge did not appear. Towards 4 o'clock a paper-money man requested Martin Seamans to go and see the Judge, and tell him the people are waiting. Ses-mans returned in a short time, and when asked if he had seen the Judge, he answered no; he had seen his old negro wo-man, and she said the cow had run away, and master had gone down to Tockwotton to look for her, and she hoped he would find her before dark to be milked. A strong voice from one of the seats then exclaimed, this court is adjourned without day; and the whole company arose and departed. Thus ended the great jackknife case. The next day the shops were opened and business revived, and Martin Seamans said that the Judge's cow, in her journey to Tockwotton, had well de-cided a case which had puzzled all the lawyers in the State.

This was the only case under the penal law in the county of Providence.

A PILGRIM RELIC.

FROM THE BOSTON TRAVELLER OF NOVEMBER 25. We are sorry to be obliged to record the destruction of that venerable relic of the Pilgrims, the old Pear Tree at East- pate them seems like dislocating the very elements of indiham, planted by Gov. PRINCE, of Plymouth Colony, more | yidual being. than two centuries ago. The Yarmouth Register informs us that the tree was blown down during the late gale. This interesting memorial of the Pilgrim band stood, we

believe, upon the farm of Mr. FREEMAN, in Eastham, once the dwelling place of Gov. Prince, by whose hands the tree s said to have been planted.

About the year 1643 the Plymouth Company, discovering that they had settled upon a very barren soil, began to look about for a better place; and, after various explorations, they pitched upon Nauset, (now Eastham,) and having purchased the land of the Indians, they agreed all to go there together, it being considered undesirable to separate and weaken the company. A portion of the company-of whom Mr. Prince, afterwards Governor, was one-went and commenced a settlement at Nauset, Mr. Prince occupying the spot now included

es, which purported to be addressed to the old Pear Tree | which is so common a characteristic

Old Time has thinned thy boughs, old Pilgrim Tree, And bow'd thee with the weight of many years; Yet, 'mid the frosts of age, thy bloom we see, And yearly still thy mellow fruit appears. Venerable emblem of our sires of Like them thou hast performed life's labors well : And when, like them, thy days are past and o'er, These lines may help thy lengthen'd stories tell.

WINTER PLEASURES.

We hear (says the Albany Evening Journal) almost with eelings of envy that the whole country north and east of us ral fondness for knowledge. s covered with a goodly depth of snow, and that the gay music of bells and fine sleighing are enlivening the dreariness of the child will work with a heroism which he will never surwinter, while we on the seaboard are without this charming pass in after life. Children are untiring in the pursuit of all mantle, and are shivering over frozen pavements and slippery those objects which interest them. The elements of natural sidewalks. The winter pleasures of town and country differ science, when properly unfolded, produce this effect: they ax a stronger desire to participate in the cooling and quiet luxu- sary to connect physical labor with the acquisition of knowries of leafy June than we now have to leave the city and enjoy the gay festivities, the glorious ride over hill and dale, the lished. When a boy or girl has some darling purpose to gain, warm greetings, the merry gatherings, and the crackling fires if order, close observation, and industrious effort are indispenthat may every where be found in the interior. We here have sable to the attainment of this purpose, they are of course in parties, and balls, and routs, and amusements endless; but the best condition to cultivate these fundamental attributes of what are these compared to a seat, well lined and furred, be- character. Mr. Holbrook makes it an essential feature of his hind two spanking bays, trotting their twelve miles to the system to connect physical with mental labor, and to sender hour to the brisk jingling of merry-toned bells. At your side them attractive by giving play to curiosity, and by adroitly. sits the pride of your eye, none the less levely from the mantling blood on her cheek, kissed by the keen air as you skim which control the unfolding intellect. along the smooth surface of the well-trod path. Then there is the kind and hospitable welcome that awaits you—the thought habits so long as their parents and teachers are too indolent to of it increases your speed. You arrive—the smoking horses deviate from the beaten pathway of education now in prevaare covered and stabled; you are ushered into a warm parlor, lent use. Flogging is still largely recognised as the most pobrilliant with a fire of glowing hickory ; you answer a thou- tent stimulus which can be brought to bear upon the young sand tender questions while pulling off your overcoat and your mind; and is so recognised because it is the easiest, most furs ; you draw around the family hearth, nerved by the cold, summary, least troublecome, and most readily resorted to in to feel yourself a Hercules, and to talk as well as a happy all contingencies, and, as a consequence, the most congenial heart, a gay spirit, and a good appetite will let you. Then to laziness on the part of the nominal instructor. comes the ride home again; but we must rein up-there are some things even Mrs. Grundy should not hear, and we are perpetuity simply to the fact that they dispense with any great the last to betray the confidence which sleigh-riding of a win- amount of effort on the part of the teacher. He has only to ter's evening is always thought to impose on all participators pass mechanically through a prescribed routine of exercises. in its unequalled delights.

SCYLLA. As the breadth across this celebrated strait has been so often

disputed, I particularly state that the Paro Tower is exactly

six thousand and forty-seven English yards from that classica bugbear, the Rock of Scylia, which by poetical fiction has been depicted in such terrific colors, and to describe the herrors of which Phalerion, a painter celebrated for his pervou representation of the awful and the tremendous, exerted his whole talent. But the flights of poetry can seldom bear to be shackled by homely truth, and if we are to receive the fine magery that places the summit of this rock in clouds brooding eternal mists and tempests, that represents it as inaccessible, even to a man provided with twenty hands and twenty feet, and immerses its base among ravenous sea-dogs, why not also receive the whole circle of mythological dogmas of Homer, who, though as frequently dragged forth as an authority in nistory, theology, surgery, and geography, ought, in justice, o be read only as a poet. In the writings of so exquisite a ard, we must not expect to find all his representations stricty confined to a mere accurate narration of facts. Moderns of ntelligence, in visiting this spot, have gratified their imaginations, aiready heated by such descriptions as the escape of the Argonauts and the disasters of Ulysses, with fancying it the courge of seamen, and that in a gale its caverns " roar like of the crew, and no expense should be grudged to secure a ship and its passengers from such a melancholy mishap as little worn at its base, and surmounted by a castle, with a our public streets. He looked wretched, was ghastly pale, and that of fire.

THE NEW SATELLITE OF SATURN.

The extraordinary manner in which scientific discoveries We are indebted to a venerable friend, who takes a great are made at one time by different persons, independently of nterest in historical affairs, for the following agreeable remi- each other, has often been matter of note. In speculation it is easy enough to see that such coincidences are likely; for many heads are at work upon the same stage of knowledge, and since it is thus tolerably certain that when the hour is come the man will be at his post, it is not impossible that two or more may make an advance together, or nearly so. But in a matter of pure observation, and in a field in which there is no essential reason for there being two laborers at the same moment, the coincidence is more striking. By letters from America, it appears that Mr. Bonn, of Cambridge, United States, detected the eighth satellite of Saturn so nearly at the same time as Mr. Lassell, that the steps of the two discoveries run thus :

> MR. LASSELL. Sept. 16th.-

Sept. 18th .- Observes two

Sept. 16th .- Notices a small star nearly in the plane of the ring between Titan and Ispetion with regard to Saturn. Sept. 18th.—Notices the

stars near Saturn, of which he same object, and measures was unable to determine which again more carefully, but still "scarcely suspected its real and neighboring stars. Sept. 19th.—Establishes

Sept. 19th .- Finds that the that both stars share the mo-tion of the planet—that one is trograde motion of Saturn—

Iapetus, and the other a new and establishes the satellite. It thus appears that there is no priority in either observer,

as to the first suspicion that the new star was a satellite. Mr. Boxp had seen it on the 16th, but regarded it as accidental, and did not then even make that "careful" measure which he thought it right to do on the 18th. On this satellite our opinion is, that the English ought to say it was discovered by Bond and Lassell-the Americans by Lassell and Bond-The name given by Mr. Lassell, Hyperion, will probably not be objected to."-London Atheneum.

We understand that at a recent meeting of the American Academy of Arts and Sciences, in this city, the committee appointed to confer with Mr. Bond on the subject of naming the new satellite, reported that he agreed with Mr. Lassell in the name of Hyperion; by which it will accordingly be known. Its period of revolution, according to the determination of Mr. G. P. Bond, is about 21 days; it is therefore in the order of distances the seventh from Saturn .- Boston Traveller.

EARLY HABITS OF INDUSTRY.

There is no truth more clearly confirmed by the universal experience of man than that habits, whatever they may bewhen once fixed, are very difficult to eradicate -- so difficult. ndeed, that most persons are disposed to pronounce it practically impossible. It is no matter whether these habits are good or bad, or by what means acquired; when once formed they cling to character with a tenacity so vital that to extir-

The time in which most of our habits are established is during the period of extreme youth, while the nature is vielding, pliant, impressible, and susceptible of being moulded and directed by the slightest effort. All will, therefore, concede the necessity of watching with unremitting vigilance the developments of those early qualities and dispositions by which the complexion and fortunes of after life are determined.

Habits of industry are among the first that should receive attention, as there are few more all-important than these. It is, however, quite needless to dilate upon their importance : the only question being as to the best method of inculcating

How can children be best taught the practice and love of industry? Before answering this question directly we must be allowed to say that children are naturally industrious by a in Mr. Freeman's farm, where he planted this pear tree. Be- law of their constitution. They are necessarily active; when fore the whole company, however, had made arrangements to not asleep, they are always in motion, putting forth exertion remove to Nauset the project was abandoned, and it was con- as if by instinct. We are not then to create the material out cluded to continue at Plymouth. Mr. Prince and his party of which these habits are to be fabricated. We are not only remained at Nauset, where some of the land had been cleared required not to repress a natural tendency; but, on the other and long improved by the Indians. Mr. Prince, even after hand, to encourage and train its free and exuberant growth. he had been chosen Governor, continued to reside at Nauset. But how is this to be done? We answer briefly by placing We had an opportunity, in the summer of 1847, of paying before the child those natural stimulants to action with which our respects to the Prince Pear Tree. It was then yielding the Creator's works every where abound. Curiosity and imfruit to the seventh or eighth generation. At the time we co- itation are perhaps the strongest tendencies of the young pied, from some source not now recollected, the following mind. Curiosity inspires that unceasing flow of questions by a descendant of one of Gov. Prince's companions in the the love of imitation excites to continual action. Most children, through the strength of this propensity, acquire a language before they are four years old, learn to pronounce innumerable words and affix to them distinctive ideas, simply by imitating others.

> We think the plan adopted by that indefatigable friend of youth, Mr. J. Holbrook, of the city of New York, respecting the formation of early habits of industry, to be unsurpassed in its experience, the correctness of its principles, and the success of its results. He has demonstrated in innumerable cases, many of them so refractory as to resist all other modes of influence, that small lads may be excited to voluntary and persevering exertions by simply taking advantage of their natu-Once arouse a desire of accomplishing something noble, and

s much in seasons like this as in summer, and we hardly have their attention, kindle enthusiasm, and it is now only neces-

One thing is clear : children will never contract industrious

The unnatural modes of study at present in use owe their The task of a teacher, if rightly executed, is arduous and toilsome, and it can never be expected that young pupils will form industrious habits with examples of indolence constantly before them, and no outlay of effort to render the road to knowledge attractive and pleasing .- American Artisun.

A SUSPENSION BRIDGE OVER THE MISSISSIPPI AT ST. ours .- The project of bridging the Father of Waters might at first view appear a little extravagant, but such a thing is positively practicable, and Mr. ELLET, who has already socceeded in connecting opposite shores under as great difficulties, for the purpose of facilitating travel and business, now proposes that applications shall be made by the citizens of Missouri and Illinois during the next Legislature to procure a charter to construct a suspension bridge over the river at St. Louis. He proposes that a cheap bridge, supported on wooden towers. but of ample strength and width to withstand the weights to be borne, or the gales to be resisted, can be first built and successfully used for many years; and then, when the inclination of the shareholders, or the accumulated profits of the work will justify it, the wooden towers may give place to stone, and a more costly structure supersede the first, with but little waste of labor or valuable material, and without any internels sion of the travel.

CHANGES IN MAN'S LIFE .- About five years ago we saw a man light his cigar with a twenty dollar note of the Far-mers' and Mechanics' Bank. At that time he was full of life. dogs;" but I, as a sailor, never perceived any difference between the effect of the surges here and on any other coast, yet and in the possession of real estate in the city of Philadelphia I have frequently watched it closely in bad weather. It is now, valued at \$80,000. Alas! what changes doth Time makeas I presume it ever was, a common rock, of bold approach, a on Saturday last this foolish man was seen begging aims in